

Claims

[c1] What is claimed is

1. A method and apparatus for implementing the same phase power supply scheme comprising:

(a) Means for selecting one phase from the three source lines and de-energizing the loads of three phase lines at the demand side while the switchover takes place from the normal power supply scheme to the same phase power supply scheme, and

(b) Arranging the power supply to be supplied only to the load at single-phase line with the neutral line as a return (grounded) line; and

(c) Categorizing the power consumption subscribers by emergency and non-emergency groups in a way to minimize the power shut down impact on the subscribers and to differentiate the charge rates between the emergency and non-emergency subscribers.

[c2] 2. A method and apparatus for implementing the same phase power supply scheme as set forth in claim 1, wherein said means is an interlocked tie-breaker with a phase selector as an optional device.

[c3] 3. A method and apparatus for implementing the same

phase power supply scheme as set forth in claim 1, wherein the power is arranged to supply to (1) the loads connected between the single-phase line and neutral line on the secondary side of single phase transformer, and/or (2) the loads connected between the single-phase line and neutral line on the secondary side of three-phase transformer with grounded wye connection, meanwhile the loads connected on phase-to-phase and/or three-phase lines will be de-energized automatically.

[c4] 4. A method and apparatus for implementing the same phase power supply scheme as set forth in claim 1, wherein the power system to be operated in either normal power supply scheme or same phase power supply scheme is determined by the factors of the power distribution balance and load demand.

[c5] 5. A method and apparatus for implementing the same phase power supply scheme as set forth in claim 4, wherein the operating mode of scheme may be switched over manually or automatically through said means described in claim 2.